



OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/021,577

DATE: 01/30/2002  
TIME: 16:07:38

Input Set : A:\00-87.seq.txt  
Output Set: N:\CRF3\01302002\J021577.raw

3 <110> APPLICANT: Sheppard, Paul O.  
4       Bishop, Paul D.  
6 <120> TITLE OF INVENTION: Seleno-cysteine Containing Protein  
7       Zsnk13  
9 <130> FILE REFERENCE: 00-87  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/021,577  
C--> 11 <141> CURRENT FILING DATE: 2001-12-12  
11 <150> PRIOR APPLICATION NUMBER: 60/256,676  
12 <151> PRIOR FILING DATE: 2000-12-18  
14 <160> NUMBER OF SEQ ID NOS: 6  
16 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
18 <210> SEQ ID NO: 1  
19 <211> LENGTH: 1355  
20 <212> TYPE: DNA  
21 <213> ORGANISM: Agkistrodon piscivorus piscivorus  
23 <400> SEQUENCE: 1  
24 ggatccaggc tgaattcggc acgaggctgg atggagacgc cgctgctttg gctgccgctg 60  
25 ctgctgctgg ggctgctctc ggccttggcg ccgctgcgcg ccgtgcagct cgaccggagc 120  
26 cgcctgcagt ggctggcccg cgggaagggtg gagagctgtg gaggatgacg cttgaaccgc 180  
27 ctgccagagg taaaggcctt tctcaacgaa gacctgcctt tgtaccacaa catggacttg 240  
28 aagtacctgg ctggagcggc ccctgagctc atcctgctca acattcaatt tgaagaactt 300  
29 cagagaatcc cattgagtga catgagccgg gaagagataa accagctgat gcaagaattt 360  
30 ggattctacc ggaaaagacac gcccggactcc cctgttcccg atgctttca aatggcgcct 420  
31 gctaattcacc tgccatcaga tgtggaagca atgaagaaca gacgtgcgaa agagaaaaag 480  
32 ggggcggggg gtccagaccc atagaattca acgtgctctg cttgtgaagg gtgcctgtta 540  
33 gaaagaatgg gaagtctcag ggcattggca atatctaaat aatctgcaac catatagata 600  
34 agatctccctg tggttcacac acggctgaat tgtgctgccc gagaattaa catttagaga 660  
35 agattcaaag gctgcaaaact tttgcttaag gagaagaact tttgcccctc agaagcaaaa 720  
36 tgtgcaaaac aaagacagcc acatatatgc aaccccccggc cagttacaga cagcccttga 780  
37 cttacgacta caatcgagac tggaaaaaac gttgttaagc atgtgcagtt gtcaagcaag 840  
38 acacccacat ggctgtgatt gtgactttcc cgcctgctt cggccacttgc tttgtgcttg 900  
39 tcggaaagccg gttggaaag gttgcaaaatg gcgactgtgt gacttgcaga acaccgactg 960  
40 tggtaaggg caagccaaca accaacaatc acaacagccc ttgtcaaattt gtcgtaagt 1020  
41 aagggctgcc tggtaactcgg acggaaattga ctggagaag cctcaaggaa ttccgcctt 1080  
42 catcccaaga cggatccctt gcacaaggca ccacacaagg gtccactccc gtgaccagca 1140  
43 cttccctcc aggtgtgcct caccgtgtca ggacaggatg aagccctctg cagaaagctt 1200  
44 ttgctgctga gggtgatag acacgtccctc tcgggtggg agcgcagcct gctggggagc 1260  
45 aggtcgccaa accccaactg gtttaggata gtaacaataa agttgccttc gtcaaccacc 1320  
46 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 1355  
48 <210> SEQ ID NO: 2  
49 <211> LENGTH: 110  
50 <212> TYPE: PRT  
51 <213> ORGANISM: Agkistrodon piscivorus piscivorus

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53 <220> FEATURE:  
54 <221> NAME/KEY: VARIANT  
55 <222> LOCATION: (46)...(46)  
56 <223> OTHER INFORMATION: Xaa is selenocysteine.  
58 <400> SEQUENCE: 2  
59 Met Glu Thr Pro Leu Leu Trp Leu Pro Leu Leu Leu Gly Leu Leu  
60 1 5 10 15  
61 Ser Ala Leu Ala Pro Leu Arg Ala Val Gln Leu Asp Arg Ser Arg Leu  
62 20 25 30  
63 Gln Trp Leu Ala Arg Gly Lys Val Glu Ser Cys Gly Gly Xaa Arg Leu  
64 35 40 45  
65 Asn Arg Leu Pro Glu Val Lys Ala Phe Leu Asn Glu Asp Leu Pro Leu  
66 50 55 60  
67 Tyr His Asn Met Asp Leu Lys Tyr Leu Ala Gly Ala Asp Pro Glu Leu  
68 65 70 75 80  
69 Ile Leu Leu Asn Ile Gln Phe Glu Glu Leu Gln Arg Ile Pro Leu Ser  
70 85 90 95  
71 Asp Met Ser Arg Glu Glu Ile Asn Gln Leu Met Gln Glu Leu  
72 100 105 110  
75 <210> SEQ ID NO: 3  
76 <211> LENGTH: 471  
77 <212> TYPE: DNA  
78 <213> ORGANISM: Artificial Sequence  
80 <220> FEATURE:  
81 <223> OTHER INFORMATION: This degenerate nucleotide sequence encodes the  
82 amino acid sequence of SEQ ID NO:2.  
84 <221> NAME/KEY: variation  
85 <222> LOCATION: (1)...(471)  
86 <223> OTHER INFORMATION: N is A, G, C, or T.  
88 <400> SEQUENCE: 3  
W--> 89 atggacacnc cnytntytng gytncnytn ytnytntng gnytntnws ngcnytngcn 60  
W--> 90 ccnytnmgng cngtncaryt ngaymgnwsn mgnytncart ggytngcnmg nggnaargtn 120  
W--> 91 garwsntgyg gnggnnnnmg nytnaaymgn ytnccngarg tnaargcntt yytnaaygar 180  
W--> 92 gayytncny tntaycaya aatggytng cnggngcnnga yccngarytn 240  
W--> 93 athytnytna ayathcartt ygargarytn carmgnatbc cnytnwsnga yatgwsnmg 300  
W--> 94 gargaratha aycarytnat gcargarytn ggnttytaym gnaargayac nccngaywsn 360  
W--> 95 ccngtnccng aycnttyca ratggcnccn gcnaaywsny tnccnwsnga ygtngargcn 420  
W--> 96 atgaaraaym gnmngncnaa rgaraaraar ggngcnggng gnccngayt n 471  
98 <210> SEQ ID NO: 4  
99 <211> LENGTH: 48  
100 <212> TYPE: DNA  
101 <213> ORGANISM: Artificial Sequence  
103 <220> FEATURE:  
104 <223> OTHER INFORMATION: Selenocysteine insertion motif.  
106 <221> NAME/KEY: variation  
107 <222> LOCATION: (5)...(14)  
108 <223> OTHER INFORMATION: N is A, T, G, or C.  
110 <221> NAME/KEY: variation  
111 <222> LOCATION: (15)...(16)

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112 &lt;223&gt; OTHER INFORMATION: N is A, T, G, C, or absent.

114 &lt;221&gt; NAME/KEY: variation

115 &lt;222&gt; LOCATION: (19)...(34)

116 &lt;223&gt; OTHER INFORMATION: N is A, T, G, or C.

118 &lt;221&gt; NAME/KEY: variation

119 &lt;222&gt; LOCATION: (35)...(44)

120 &lt;223&gt; OTHER INFORMATION: N is A, T, G, C, or absent.

122 &lt;221&gt; NAME/KEY: variation

123 &lt;222&gt; LOCATION: (45)...(45)

124 &lt;223&gt; OTHER INFORMATION: N is A, T, G, or C.

126 &lt;221&gt; NAME/KEY: variation

127 &lt;222&gt; LOCATION: (48)...(48)

128 &lt;223&gt; OTHER INFORMATION: N is A, T, G, or C.

130 &lt;400&gt; SEQUENCE:/4

131 augannnnn nnnnnnaann nnnnnnnnnn nnnnnnnnnn nnnnnngan

48

133 &lt;210&gt; SEQ ID NO: 5

134 &lt;211&gt; LENGTH: 40

135 &lt;212&gt; TYPE: DNA

136 &lt;213&gt; ORGANISM: Artificial Sequence

138 &lt;220&gt; FEATURE:

139 &lt;223&gt; OTHER INFORMATION: Selenocysteine insertion element.

141 &lt;400&gt; SEQUENCE: 5

142 atgaaggcct ctgcagaaag ctttgctgc tgagggtgga

40

144 &lt;210&gt; SEQ ID NO: 6

145 &lt;211&gt; LENGTH: 44

146 &lt;212&gt; TYPE: DNA

147 &lt;213&gt; ORGANISM: Artificial Sequence

149 &lt;220&gt; FEATURE:

150 &lt;223&gt; OTHER INFORMATION: Selenocysteine insertion element.

152 &lt;400&gt; SEQUENCE: 6

153 atgaaggcct ctgcagaaag ctttgctgc tgagggtgga taga

44

**VERIFICATION SUMMARY**  
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Input Set : A:\00-87.seq.txt  
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L:11 M:270 C: Current Application Number differs, Replaced Current Application No  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4